products.

15. (Amended) A process according to claim 13, wherein the solid phase agent is a refractory oxide.

18.(Amended) A process according to claim 12, wherein the solid phase agent is sprayed onto the surface.

19.(Amended) A process according to claim 1, wherein additional thermal or radiation energy, including UV, IR, microwave, RF, X-ray, electric fields and magnetic fields, is applied to the substrate.--

Please add the following new claims:

--20.(New) A process according to claim 13, wherein the solid phase agent is sprayed onto the surface.- -

REMARKS

The claims have been amended to eliminate multiple dependencies. Two sets of claims are included, one set showing the changes made in this response (attached) and one clean set (set out above). No new matter has been added to the application.

A declaration has been enclosed. However, no additional claims fees have been included as the multiple dependencies have been removed by preliminary amendment.

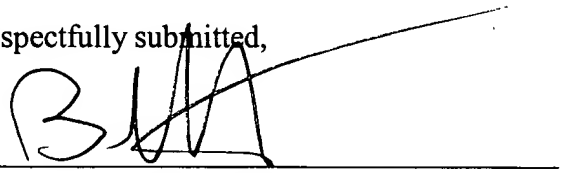
Applicant respectfully submits that the application is in condition for allowance. A Notice of Allowance is hereby respectfully requested.

Should the Examiner feel that a telephone conference would advance the prosecution of this application, he is encouraged to contact the undersigned at the telephone number listed below.

Applicant respectfully petitions the Commissioner for any extension of time necessary to render this paper timely.

Please charge any fees due or credit any overpayment to Deposit Account No. 50-0694.

Respectfully submitted,



Seth M. Nehrbass, Reg. No. 31,281
Charles C. Garvey, Jr., Reg. No. 27,889
Gregory C. Smith, Reg. No. 29,441
Stephen R. Doody, Reg. No. 29,062

H. Roy Berkenstock, Reg. No. 24,719
Brett A. North, Reg. No. 42,040
GARVEY, SMITH, NEHRBASS & DOODY, L.L.C.
PTO Customer No. 22920
3838 N. Causeway Blvd., Suite 3290
Metairie, LA 70002
Tel.: (504) 835-2000
Fax: 504-835-2070
e-mail: IPLNO@AOL.COM
www.neworleanspatents.com

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on this 13 day of December, 2001.

P:\Brett\98148.17-PreAmend+Res.wpd

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: RAMSHAW, Colin and
JACHUCK, Roshan, Jeet, Jee

ASSIGNEE: Protensive Limited (A UK Company)

U.S. APPLICATION NO.: 09/913,966

INTERNATIONAL APPL. NO.: PCT/GB00/00524 I.A. FILING DATE: 02-17-2000

FOR: "PROCESS FOR THE CONVERSION OF A FLUID PHASE SUBSTRATE BY DYNAMIC HETEROGENEOUS CONTACT WITH AN AGENT"

ATTORNEY DOCKET NO.: A01203US (98148.17)

* * * * * * * * * * * * * * *

Copy of Amendments Showing Changes

The application has been amended in the foregoing amendment to read as follows (added matter is underlined and omitted matter is in brackets). To facilitate prosecution all claims have been included, even those not amended:

1. (Amended) A process for the conversion of a substantially fluid phase substrate [(15)] by heterogeneous contact of the substrate[(15)] or a fragment or derivative thereof with a substantially solid phase agent wherein the solid phase agent is comprised as a surface [(5,33,35)] of a support element [(3)] or part thereof and the support element [(3)] is adapted to rotate around an axis [(6)] such that the solid phase agent provides a rotating surface [(5,33,35)] or part thereof and the substrate [(15)] provides a film [(17)] flowing substantially radially outward from the axis [(6)] in dynamic contact with the agent; characterised in that additional vibrational energy is applied to the substrate [(15)].

2.(Amended) A process according to claim 1, wherein the additional vibrational energy is applied to the substrate [(15)] when on the rotating surface [(5,33,35)].

3.(Amended) A process according to claim 1[or 2], wherein the additional vibrational energy is applied to the substrate [(15)] as it is being supplied to the rotating surface [(5,33,35)].

4.(Amended) A process according to claim 1[, 2 or 3], wherein the additional vibrational energy is applied to the substrate [(15)] after it has flowed across the rotating surface [(5,33,35)].

5.(Amended) A process according to [any preceding] claim 1, wherein the additional vibrational energy is applied as ultrasound.

6.(Amended) A process according to [any preceding] claim 1, wherein the rotating surface [(5,33,35)] is mechanically vibrated.

7.(Amended) A process according to claim [6]1, wherein the rotating surface [(5,33,35)] is mounted off-centre on the axis of rotation [(6)].

8.(Amended) A process according to claim [6 or 7]1, wherein the surface [(5,33,35)] is flexibly mounted on the support element [(3)].

9.(Amended) A process according to claim [6, 7 or 8]1, wherein a mechanical vibrator is attached to the surface [(5,33,35)] or the support element [(3)].

10.(Amended) A process according to claim 5, wherein the axis [(6)] is substantially vertical with the support element [(3)] adapted to rotate thereabout with the surface [(5,33,35)] uppermost, and wherein ultrasound is applied to the substrate [(15)] from an ultrasonic emitter located above the surface [(5,33,35)].

11.(Amended) A process according to [any previous] claim 1, wherein the solid phase agent is in the form of a mesh, grid or corrugated surface.

12.(Amended) A process according to [any previous] claim 1, wherein the solid phase agent comprises a nucleation or growth agent adapted for fluid phase substrate conversion by phase change to form crystals or grow seed crystals.

13.(Amended) A process according to [any one of] claim[s] 1[to 11], wherein the solid phase agent comprises a reagent, catalyst or initiator adapted for fluid phase substrate conversion by reaction to form products.

14. A process according to claim 13, wherein the solid phase agent is a zeolite.

15. (Amended) A process according to claim 13, wherein the solid phase agent is a refractory oxide [(34,35)].

16. A process according to claim 13, wherein the solid phase agent is a sol gel.

17. A process according to claim 13, wherein the solid phase agent is Phillips catalyst.

18.(Amended) A process according to [any one of] claim[s] 12[to 17], wherein the solid phase agent is sprayed onto the surface [(5,33,35)].

19.(Amended) A process according to [any preceding] claim 1, wherein additional thermal or radiation energy, including UV, IR, microwave, RF, X-ray, electric fields and magnetic fields, is applied to the substrate [(15)].

20.(New) A process according to claim 13, wherein the solid phase agent is sprayed onto the surface.

P:\Brett\98148.17-PreAmend+Res.wpd